

BISZKUP, F.

AGRICULTURE

PERIODICAL: MAGYAR MEZOGAZDASAG. Vol. 10, no. 21, Nov. 1955.

Biszkup, F. Forage of brood hens in winter. p. 22.

Monthly list of East European Accessions (EEAI) LC. Vol. 8, No. 2,
February 1959, Unclass.

DIS-21501, 1

✓ Influence of vitamin B₁₂ on egg production and hatchability. L. Kállai, B. Aros, F. Biskup, and U. P. Kralovanszky (Inst. Univ. Med., Budapest). *Acta Agron. Acad. Sci. Hung.* 5, 441-9 (1956) (in German) (English summary).— Cryst. vitamin B₁₂ addns. at the rate of 25 γ /kg. of feed increased egg production of ducks and geese. With hens the wt. of chicks hatched from eggs with 5-10 γ of vitamin B₁₂ injected into the yolks was 5-7% above the controls. The transfer of vitamin B₁₂ from hen to egg was studied in Hungarian yellow hens where 25 γ of cobalamin/kg. of feed increased hatchability 10%. C. W. Ackerson

BISZKUP, F.

BISZKUP, F. When and what we should give to newly hatched chickens for feeding. p. 30

Vol. 11, No. 10, May 1956

MAGYAR MEZAGAZDASAG

AGRICULTURE

Budapest, Hungary

SO: EAST EUROPEAN ACCESSIONS, VOL. 6, no. 3, March 1957

BISZTRAY, Denes

Ballast resistance of the wooden-bottom insulated rails.
Vasut 8 no.2:16-17 15 Mr '58.

BISZTRAY, K.

Weekdays of the Keszthely Forestry. p. 10.

ERDOGAZDASAG ES FAIPAR. (Mezogazdasagi Konyves Folyoiratkiado Vallalat) Budapest, Hungary, No. 8, (Aug.) 1959.

Monthly List of East European Accessions (KEAI) LC, Vol. 8, No. 11, November 1959, Uncl.

BISZTRAY-BALKU, A
SURNAME, Given Names

Country: Hungary

Academic Degrees: [not given]

Affiliation:

Source: Leipzig, Isotopentechnik, No 5-6, May 1961, pp 144-146.

Data: "Determination of Calorific Value of Coals by Rays from Radioactive Sources."

Authors:

KAKAS, J. Csepel Iron and Metal Works, Csepel [no original language version given]

NAGY, M. Csepel Iron and Metal Works, Csepel

VARGA, K. Csepel Iron and Metal Works, Csepel

BISZTRAY-BALKU, A. Powerplant-Designing Bureau, Budapest [no orig. lang. v. given]

LEVAI, A. Powerplant-Designing Bureau, Budapest

SL

SPD 901643

BISZTRAY-BALKU, Sandor

Theoretical aspects of moving field radiation. Magy. radiol.
8 no.1:49-56 Feb 56.

1. Okl. gepessmernok, hiv. rontgenszakerto.
(RADIOTHERAPY
moving field ther., methods & appar. (Hun))

KOCZKAS, Gyula, dr.; ~~BISZTRAY-BAKU~~, Sandor, dr.; URBAN, Janos

Adjustments of a voltmeter on the switchboard of a voltage
regulator of a therapeutic x-ray apparatus. Magy. radiol. 16
no. 1: 55-56 F'64.

1. Országos "Frédéric Joliot Curie" Szénbiológiai és Szén-
egészségügyi Kutató Intézet (igazgató: Varteresz Vilmos, dr.)

*

BISZTRAY-BALKU, Sandor

Modern radiation protection in a radiological laboratory.
Orv. hetil. 105 no. 26:1219-1222 28 Je'64

1. Országos "Frederic Joliot-Curie" Sugárbiológiai és Sugárgesetzsegügyi Kutató Intézet (Varteresz, Vilmos, dr.)

BARANY, J. BISZTRAY-BALKU , S.

Picture-intensifying devices and modern radiation protection.
Orv. hetil. 105 no.38:1815-1816 20 S'64

KLEIZIENE, C.; BISTRICKAITĖ-RUDAITIENE, A., med. m. kand.

A case of intrapericardial teratoma. Sveik. apsaug. no.10:33-36
'62.

1. Vilniaus klinine ligonine. Vyr. gyd. — S. Trepsys.
(PERICARDIUM) (TERATOID TUMOR)

60. On the determination of the magnitude of earthquakes.
K. Hissarjanany, Thesis for the degree of candidate
of science, 80 p., 10 figs., 8 tabs.

Based on the works of Richter and Gutenberg the dimensional equation regarding the Wiechert pendulum of Budapest ($V \sim 100$, $T_0 \sim 10$, $\epsilon \sim 5$) has been elaborated, $M = \log A_m + 1.30 \log \Delta^0 + 2.63$. The probable error of the determination of magnitude is $1/4 M$ unit. The equation can be applied in the $10^\circ < \Delta^0 < 180^\circ$ range. In the equation M represents the magnitude of the quake, A_m the max. soil amplitude of the surface waves of 20 sec. frequency, Δ^0 the distance of the epicentre. The magnitude of near quakes cannot be determined by the above equation. It cannot be extended to cover $\Delta^0 < 10^\circ$ for the following reasons: due to the low paper velocity the frequency cannot be read and the wave is far from being sinusoidal, thus the conversion formula is hardly valid. An exceedingly quick and useful method consists in the determination of the magnitude of earthquakes from the duration of the subabundance time of a surface wave. The logarithm of the period P -- ϵL , expressed in minutes, is a linear function of the magnitude. Representing the end of the quake and ϵL the beginning of the surface wave. Both symbols have been introduced a long time ago. The dimensional equation obtained in this way is $M = 2.12 \log \epsilon + 0.0083 P + 2.88$. The method proved to be practicable in the $0 < \Delta^0 < 180^\circ$ range with a probable error of $1/4 M$.

BISZTRICSANY, E.

On the determination of earthquake magnitudes. In English. p. 39

ANNALES. SECTIO GEOLOGICA. Budapest, Hungary, Vol. 2, 1958

Monthly List of East European Accessions (EEAI) LC, Vol. 9, No. 2, Feb. 1960
Uncl.

BISZTRICSANY, Ede

Data on the new method for determining the size of earthquakes. Geofiz korsz 7 no.2:69-96 '58.

BISZTRICSANY, Ede; KISS, Zoltan

Computation of the mean thickness of the earth's crust on a Eurasian wave path by means of the dispersion curve of the Love waves. Geofiz kozl 8 no.4:147-150 '60.

S/169/62/000/006/012/093
D228/D304

AUTHOR: Bisztricsány, E. A.

TITLE: Equation for determining the magnitude for Budapest

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 6, 1962, 15, abstract 6A108 (Geofiz. közl., 9, no. 3-4, 1961, 97-103)

TEXT: The equation is derived on the basis of 229 shallow earthquake investigations. It is suitable when $10^{\circ} < \Delta < 180^{\circ}$. The average error for the magnitude's determination is 0.34 of M. /Ab-
stracter's note: Complete translation. /

Card 1/1

BISZTRICSANY, E. (Budapest)

On the problem of magnitude determination. Studii astron seismol
6 no.2:221-223 '61.

BISZTRICSANY, Ede, dr., kandidatus

Earthquake or underground nuclear blast? Elet tud 17
no.49:1544-1547 9 D '62.

1. Eotvos Lorand Tudomanyegyetem Geofizikai Tanszeke,
Budapest.

IVANOV, I.O.; BISTRITSKIY, G.B.

Effect of ions and genes on the hydrate film of the molecule
of alcohol dehydrogenase of yeast as studied by polarography.
Dokl. AN SSSR 165 no.3:791-793 N 1965. (MIRA 18411)

1. Institut mikrobiologii AN SSSR. Submitted July 22, 1965.

DEVENYI, Miklos; TOTH, Laszlo; BISZTROM, Karoly

Spark machining of hard metals. Gep 15 no.11:432-438 N'63

1. Keményfémipari Vállalat.

BISZTYGA, Kazimierz; SENKOWSKI, Jacek

Electrically driven roller. Problemy proj hut masz 12 no.4:
116-124 Ap'64

1. Akademia Gorniczo-Hutnicza, Krakow.

BISZTYGA, Kazimierz

Automatic control systems with precise performance of the program.
Archiw automat 7 no.3/4:459-464 '62.

1. Katedra Elektrotechniki Hutniczej, Akademia Gorniczo-Hutnicza,
Krakow.

BISZYNSKI, P.

"A New Material for Packings." p. 215 (GAZ, WODA I TECHNIKA SANITARNA, Vol. 27, No. 7, July 1953) Warszawa

SO: Monthly List of East European Accessions, Library of Congress, Vol. 2, No. 10, October 1953. Unclassified.

BISZYNSKI, P.

(GAZ, WODA I TECHNIKA SANITARA, Vol. 28, No. 2, Feb. 1954, Warszawa, Poland)

"Combined teams of workers and engineers as a new form of industrial management movement." p. 45

SO: MONTHLY LIST OF EAST EUROPEAN ACCESSIONS, L.C., Vol. 3, No. 4, APRIL 1954

BISZYNSKI. P.

Analysis of the present state of sewage disposal systems in some cities and villages in Warsaw District. p. 157.

GAZ, WODA I TECHNIKA SANITARNA. (Stowarzyszenie Naukowo-Techniczne Inzynierow i Technikow Sanitarnych, Ogrzewnictwa i Gazownictwa) Warszawa, Poland.
Vol. 33, No. 3, March 1959.

Monthly List of East European Accession (EEAI) LC, Vol. 8, no. 7, July 1959

Uncl.

BITA, A.

ZAMFIR, C.; TURCU, E.; BITA, A.; TEODORESCU

Adrenal cortex therapy of nonsuppurative bacterial grave acute lung diseases. Med. int., Bucur. 9 no.11:1694-1700 Nov 57.

1. Lucrare efectuata in Serviciul I medical din Spitalul militar central.
(LUNG DISEASES, therapy
cortisone in nonsuppurative bact. infect., case reports)
(CORTISONE, ther. use
pulm. nonsuppurative bact. infect., case reports)

ZAMFIR, C., dr.; TURCU, E., dr.; ~~TEODOR~~TESCU, C., dr.; BITA, A., dr.

Considerations on reversible branch blocks. Med. intern., Bucur.
11 no.12:1851-1857 '59.

1. Lucrare efectuata in Sectia I de boli interne din Spitalul
militar central, Bucuresti.
(HEART BLOCK case reports)

ZAMFIR, C., dr.; MARINESCU, B., dr.; BITA, A., dr.

Contributions to the etiopathogenesis and therapy of cardiac
erethism. Med. intern., Bucur. 11 no.5:699-710 '60.

1. Lucrare efectuata in Sectia I medicala a Spitalului militar
central, Bucuresti.

(TACHYCARDIA, etiology)

(HYPERTHYROIDISM, complications)

(MYOCARDITIS, complications)

(NERVOUS SYSTEM diseases)

RUMANIA

SANDU, G., Major, Medical Corps; BITA, A., Colonel, Medical Corps;
STEFANESCU, M., Lieutenant-Colonel, Medical Corps; and CEARNES, Victoria

"Considerations on Classification of Rheumatoid Diseases"

Bucharest, Revista Sanitara Militara, Vol. 62, No. 3, May-June 1966;
pp 441-447

Abstract: Review of taxonom diagnostic and prognostic variables in various rheumatoid syndromes based primarily on enzymatic and biochemical test responses rather than on clinical aspects. Tables show classification of criteria as to predominance (cardiac, articular or peripheral, neurodegenerative and mixed) locomotor apparatus involvement, articular visceral affection; 3 different classifications are given. 4 tables. Manuscript received 21 February 1966.

BITA, O. AND OTHERS

Geometric aspect of wear. p.864

METALURGIA SI CONSTRUCTIA DE MASINI. (Ministerul Industrii Metelurgice si Constructiilor de Masini si Asociatia Stiintifica a Inginerilor si Tehnicienilor din Romania) Bucuresti, Romania
Vol.11, no.10 Oct. 1959

Monthly list of East European Accessions (EEAI) LC, Vol.9, no.2 Feb.1960

Uncl.

24.4100

22245
R/008/60/000/005/003/014
A231/A126

AUTHORS: Biță, O., and Co-workers

TITLE: Possibilities of characterizing friction materials

PERIODICAL: Studii și Cercetări de Mecanică Aplicată, no. 5, 1960, 1117 - 1132

TEXT: The authors recommend in this paper a new criterion for the characterization of friction materials. Braking assemblies are devices which consume a certain quantity of energy, expressed by: $W = F \times L$ [W = energy, F = (friction) force, L = displacement]. The friction force is considered to be constant and the energy consumed is then represented by a rectangle. The friction force, however, is not constant and does not vary according to a known law. Thus, the friction coefficient can not be used sufficiently for the determination of the quality of the friction material. Another possibility is the energy criterion, recommended by Preotescu (Ref. 1: O. Preotescu și colaboratori, Cîteva aspecte fundamentale ale proceselor de uzură. Studii și cercetări de mecanică aplicată, 1, 169-185, 1958):

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$$\eta_u = \frac{1}{\tilde{\alpha} \frac{A}{\sigma} \frac{Q}{V} + 1},$$

where η_u = efficiency of the wear process, A = the mechanical equivalent of the heat, σ = the surface energy of the newly formed surface, Q = heat produced, V = the volume of the material produced by wear, $\tilde{\alpha}$ = a coefficient expressing the intensity of the wear process and results of $\tilde{\alpha} = \frac{V}{S}$, S being the total surface of the particles resulting by wear. It is desirable to operate with a minimum η_u . Since the efficiency of such processes is very small, the examination of a braking device first refers to its thermal behaviour. This problem presents two aspects: 1) Production of heat, and 2) Expulsion of heat. The poor behaviour of a braking device can not be explained alone by the quality of the braking material, the structural solutions having also a great influence. The braking materials are characterized by two groups of parameters. The first group consists of a) Material quality: interferes in case of an interest for the wear; b) Friction surface: the friction resistance depends on the quality and the elongation of the friction surface; c) Geometry of the brake shoes: there is an optimum

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ratio between length and width; d) Structural particularities: the mechanism of the braking process can differ, modifying correspondingly the performance of the braking material. The second group consists of: a) Load: the law of Coulomb represents only a first approximation of the reality: the load, however, considerably influences the friction coefficient and the friction force. The friction force increases with the load. Tests conducted with an FC 24 drum, 23 mm in diameter, and a brake shoe having a surface of 280 mm at loads ranging from 1 to 2.5 kg/cm², proved that the dry friction force is only slightly influenced by the relative speed, but not by the duration of the process. b) Speed and temperature: these two parameters interfere with different physical mechanisms. The displacement speed interferes with a thermal mechanism, determining the general speed of the heat. If it exceeds the dissipation speed of the heat, the temperature increases, modifying the physical state of the material. The thermal process could not yet be determined experimentally. The speed, the time and the load interfere with an increase of the temperature in the vicinity of the critical physico-chemical points. The friction force is only slightly influenced by the speed. Thus, the speed slightly influences the friction coefficient. The braking material has therefore to be characterized by the transformation

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capacity of the mechanical energy into caloric energy, at conditions determined by pressure, speed and braking time. The operation conditions can considerably differ from each other. In case of different braking materials tested at loads ranging between 1.4 and 8.4 kg/cm², and speeds between 0.8 and 12 m/sec, the following results have been obtained: a) A braking pressure below 3 kg/cm² is not recommended; b) A braking pressure above 6 kg/cm² is recommended; c) An initial overheating of very short duration can become advantageous; d) An increase of the speed increases the value of the optimum performance, but reduces the efficiency time. The following conclusions have been made additionally: a) Revolution rate is more important than the peripheral speed; b) The furling angle of the brake shoe is of great importance. An optimum thermal load of the material can be achieved at every gliding speed, if the heating and cooling time is well proportioned. On the other hand, the performance will be the better the greater is the diameter of the drum. Each braking material has a certain furling angle which guarantees an optimum performance of the assembly; for every braking material there are some conditions which guarantee an optimum performance; and, for every braking material there is an optimum load condi-

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tion. The hypothesis that the tangential force should always be proportional with the normal force is not confirmed; the effective operation conditions lead to an interference of the particularities of the installation. Thus, for certain operation conditions and at a determined surface of the drum, there is a certain friction surface of the brake shoe necessary. To check this conclusion, the area of the brake shoe was gradually reduced in two directions, obtaining two rectangular surface systems. The work was accomplished at loads of 3...30 kg/cm² and speeds of 5 m/sec. The tests were started with a furling of the drum of approx 140°, considered as a condition for a drum of 16 mm in diameter, having a speed of 1,800 rpm. On the basis of the experiments, the following results could be established: The behaviour of the material depends on the capacity to produce heat (friction coefficient); the capacity of the installation to dissipate the produced heat; the capacity of the braking material to store the excess of heat, not dissipated by the installation. The following conclusions were drawn: 1) The friction materials can be characterized by the power representation or by indicating the capacity of transforming the mechanical energy into thermal energy; 2) The experimental conditions for the characterization of the friction materials can be identical with the standardized conditions. The

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determinations can be accomplished on a laboratory scale, respecting the conditions of similarity and the constant ratio between the metal mass and the surface of the brake shoe; 3) To establish the optimum operation conditions, the determinations should be made for different values of the furling angle. The curves obtained will indicate if the braking material is thermally over- or understressed and the direction in which it has to act on the load or the speed, to obtain an optimum performance. There are 16 figures, 1 table and 2 Soviet-bloc references. ✓

SUBMITTED: May, 25, 1960

Card 6/6

BITA, Olga; DINCA, I.

Behavior of certain phosphorous additives in heavy loads. Studi
Zarec mec apl 13 no.5:1221-1232 '62.

BITA, Olga; DINCA, I.

Aspects of the behavior of some bearing materials subjected to wear. Studii cerc mec apl 14 no.2:319-330 '63.

BITA, Olga; DINCA, I.

Behavior of some additives with a phosphorus base under heavy loads. Rev mec appl 8 no.3:441-452 '63.

VASILCA, Gh.; NICA, Al.; BITA, O.; DINCA, I.

Some aspects of the effects of the structural type of two aluminum alloys on their sliding and wear-resisting performance. Rev mec appl 9 no. 5:1085-1100 '64.

1. Institute of Applied Mechanics, Rumanian Academy.

VASILICA, G.; BITA, Olga; DINCA, I.

Investigations on the wear and seizure resistance of friction hardened steel pairs. Rev mec appl Roum 9 no.6:1439-1449 '64.

1. Institute of Applied Mechanics of the Rumanian Academy (for Dinca). Submitted July 2, 1964.

VASICA, Gh.; BITA, O.; DINCA, I.

Studies on the wear and seizing resistance of hardened steel couples.
Studii cerc mec apl 17 no.6:1623-1633 '64.

1. Institute of Applied Mechanics, Rumanian Academy (for Dinca).
Submitted June 25, 1964.

VASILCA, Gh.; BITA, O.; DINCA, I.

Concomitant action in the process of friction and wear of soft and hard stages in the case of metallic structures with semihard matrix. Studii cerc me: apl 15 no.2:461-473 '64.

1. Submitted December 19, 1963.

ACC NR: AP5014664

SOURCE CODE: RU/0019/65/010/002/0451/0462

AUTHOR: Bită, Olga; Dinca, I.

ORG: Institute for Applied Mechanics of the Academy of the R. P. R.,
Bucharest

TITLE: Aspects of friction and wear in molybdenum disulfide
lubrication

SOURCE: Revue Roumaine des sciences techniques. Serie de mecanique
appliquee, v. 10, no. 2, 1965, 451-462

TOPIC TAGS: lubrication, molybdenum disulfide, friction, grain size,
metal surface, parameter

ABSTRACT: The efficiency of molybdenum disulfide (MoS_2), used as
lubricant, is strongly influenced by the purity and the homogeneity of
the grain size. This paper presents some observations and experimental
results concerning the influence of the purity and grain size of
various qualities of natural and synthetic molybdenum disulfide on
the friction and wear of metal surfaces, tested under conditions of
variable operating parameters. Orig. art. has: 5 figures and 7 tables.
[Based on author's abstract] [KS]

SUB CODE: 11/

SUBM DATE: 08Jul64/

ORIG REF: 001/ SOV REF: 001/ 2

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UDC: 539.6

OTH REF: 008/

BITADZE, A. V.

RT-1282 /Three dimensional analogue of the Cauchy-type integral and some of its applications/ Prostranstvennyi analog integrala tipa Koshi i nekotorye ego prilozheniia.

Izvestiia Akademii Nauk SSSR. Seriia Matematicheskaiia, 17(6): 525-538, 1953.

KIM, M.V.; BITADZE, M.A.; YERMILOV, B.F.; ZYDEL', A.I.; KUSHNEV, A.P.; LAZAREV, N.N.; MIRAV'YEV, D.M.; BONDAREV, P.D., kand. tekhn. nauk, nauchnyy red.; OSENKO, L.M., red. izd-va; RODIONOVA, V.M., tekhn. red.

[Erection of foundations under permafrost conditions; from practice used in the Norilsk region] Vozvedenie fundamentov v usloviakh vechnomerzlykh gruntov; iz opyta Noril'skogo raiona. Moskva, Gosstroizdat, 1962. 53 p. (MIRA 15:9)

1. Russia (1917- R.S.F.S.R.) Krasnoyarskiy ekonomicheskiy administrativnyy rayon. Sovet narodnogo khozyaystva. (Foundations) (Noril'sk--Frozen ground)

BITAUTAS, I. [Bytautas, I.] inzh.; CHIZHYUS, I. [Čižiū, I.], inzh.

Using wood concrete in building. Sel'. stroi. 13 no.6:5-6 Je '58.
(MIRA 11:6)

(Lithuania--Concrete) (Lithuania--Wood waste)

BITAUTAS, V., [Bytautas, V.] inzhener-arkhitektori

Let us construct large-panel buildings instead of brick buildings.
Zhil. stroi. no.6:6 '62. (MIRA 15:7)
(Precast concrete construction) (Apartment houses)

BITAUTAS, V., inzh.-arkhitektor

Apartment houses with walls made of foamed silicate slab.s
Zhil. stroi. no.2:16c-16d '62. (MIRA 16:1)

(Apartment houses) (Sand-lime products)

BITAY, L.

On the orthocenter of the triangles in a hyperbolic plane. Studii
cerc mat Cluj 10 no.1:17-26 '59. (EEAI 10:6)

1. Universitatea "Bolyai" Cluj, Catedra de geometrie.
(Triangle) (Hyperbola) (Geometry)

BITAY, Ladislau (Cluj)

On the center of the escribed circles of the triangles in the hyperbolic plane. Studii cerc mat Cluj 11 no.1:7-14 '60.
(EEAI 10:9)

(Triangle) (Hyperbola) (Surfaces)

BITAYAN, V.V.

ZHUMATOV, Kh. Zh.; DEMIDOVA, S.I.; BITAYAN, V.V.; POPLAVSKAYA, Ye.A.;
GOL'BERG, R.S.

Materials on the variability of the bacillary dysentery bacteria
in the human organism. Zhur. mikrobiol. epid. i immun. no.10:97
0 '54. (MLRA 8:1)

1. Iz Kazakhskogo instituta epidemiologii, mikrobiologii i
gigieny.

(SHIGELLA DYSENTERIAE)

USSR/Pharmacology. Toxicology. Chemotherapeutic Preparations
A) Antibiotics

V

Abs Jour : Ref Zhur - Biol., No II, 1958, No 52100

Author : Eitchenko D.A.

Inst :

Title : Pas in the Therapy of Scleroma

Orig Pub : V.sb.: Probl. Skleromn. infektsii Minsk, Gosizdat BSSR,
1957, 258-259

Abstract : Pas was administered to 50 patients with scleroma in different stages of the disease in doses of 203 g, four times daily (with control of the kidney function, liver condition, intestinal condition). The course of treatment - 3-4 weeks. No complications due to administration of Pas were observed. Within 5-7 days after the initiation of therapy, surgical intervention was carried out, according to indications, and on the 11th day rentgentherapy was begun. The administration of Pas favored the "rejuvenation" or the resorption of the infiltrates, leading to clinical

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USSR/Pharmacology. Toxicology. Chemotherapeutic Preparations
A) Antibiotics

V

Abs Jour : Raf Zhur - Biol., No II, 1958, No 52100

cure in a series of cases. The results of rentgentherapy
also improved, which permitted the removal of the canulas
within 2 years in all the patients, except in those who
underwent prior tracheotomy. -- L.N. Lavrent'yev.

Card : 2/2

LAZUTKA, P., med. m. kand.; BITE, A.; ARBACIAUSKIENE, L.

On the problem of improved sanitary conditions of dairy farms, of the quality of milk and of working conditions for milk maids in the Republic. Sveik. apsaug. 7 no.4(76):36-42 Ap '62.

1. Vilniaus Epidemiologijos ir higienos m. t. institutas.

(DAIRYING)

BUYAKAS, I.I., dotsent, BITE, A.P.

Work of the Lithuanian branch of the All-Union Society of Hygienists
in 1959. Gig. i san. 25 no. 11: 95-96 N '60. (MIRA 14:1)
(LITHUANIA—PUBLIC HEALTH SOCIETIES)

BUYAKAS, I.I., dotsent; BITE, A.P. (Vil'nyus)

Work of the Lithuanian Republic section of the All-Union Society of
hygienists and Sanitary Physicians in 1960. Gig. i san. 26 no.6:111-
112 Je '61. (MIRA 15:5)

(LITHUANIA--PUBLIC HEALTH SOCIETIES)

BITE, A.

Accidents due to the machanization of agriculture and their
prevention. Sveik. apsaug. 8 no.9:37-39 8'63.

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VASILICA, Gh.; NICA, Al.; BITA, O.; DINCA, I.

Some aspects of effects of the structural type of two aluminum alloys on their sliding and wear resisting performance. Studii cerc mec apl 14 no. 6: 1431-1447 '63.

Country : HUNGARY

G

Category: Organic Chemistry Natural Compounds and Their
Synthetic Analogues

Abs Jour: RZhKhim., No 17, 1959, No. 61021

Author : Bite, P.; Tuzson, P.

Inst : -

Title : "Solanum" Alkaloids. IV. Dissociation of Solasodine, I.

Orig Pub: Magyar tud. akad. kem. tud. oszt. kozl., 1958,
10, No 2, 235-240

Abstract: Solasodine (I) was dissociated in accordance with
the well known method (Kahn, R., Low J., Chen.
Ber., 1952, 85, 416). The results obtained from
acetylation and isomerization were evaluated by
the determinations of $[\alpha]_D$. Presented are curves
for the acetylation of I with $(CH_3CO)_2O$ in

Card : 1/7

Country : HUNGARY
 Category: Organic Chemistry. Natural Compounds and Their
 Synthetic Analogues

G

Abs Jour: RZhKhim., No 17, 1959, No. 61021

$C_{25}H_{42}N$ at 0, 25, 75° and at boiling point temperature. It is established that the reaction proceeds as follows: $I \rightarrow O\text{-acetyl-I (II)} \rightarrow O, N\text{-diacetyl-I (III)}$. In the acetylation of I with ketones, the yield is 65%, the reaction scheme is $I \rightarrow N\text{-acetyl-I (IV)} \rightarrow III$. Starting with I, in accordance with the usual scheme, acetate of $\Delta^{5,16}\text{-pregnadienole-3 } \beta\text{-one-20 (V)}$ is obtained with the 42% yield, in the acetylation of I with a ketone the yield is 60%. From III 68% yield of V is derived; from IV the yield of V is 20%, due to the partial acetylation of the free OH-group located at C(3) during the isomeriza-

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Country : HUNGARY

G

Category: Organic Chemistry. Natural Compounds and Their Synthetic Analogues.

Abs Jour: RZhKhim., No 17, 1959, No. 61021

tion. The hydration of I with Pd/C in CH_3COOH leads to the formation of solasodanol, the splitting of which results in the decomposition product similar to that of tomatidine (VI)-acetate of Δ^{16} -allopregnenol -3 β -anc-20 (VII), yield 20%. The above serves as a proof of similarity of the rings A, B, C, D in I and VI (aside of the double bond Δ^5). To 4 ml $(\text{CH}_3\text{CO})_2\text{O}$ at 0° were added 1 gr I and 14 ml of absolute $\text{C}_5\text{H}_5\text{N}$. After 24 hours at 0° isolated were 0.6 gr II of 189- 193° melting point (from CH_3OH), $[\alpha]_D^{20}$ of 114° (with 2; chloroform). 5 gr I, 70 ml of

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Country : HUNGARY

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Category: Organic Chemistry. Natural Compounds and Their
Synthetic Analogues

Abs Jour: RZhKhim., No 17, 1959, No. 61021

absolute C_5H_5N , 20 ml $(CH_3CO)_2O$ were boiled for
3 hours, isolating 2.7 gr III of 161-163° melting
point (from acetone), ~~IX~~ 7 20D of -52° (with 3;
chloroform); -46° (with 3; CH_3COOH). A solution
of 5gr I in 100 ml $CHCl_3$ was mixed with a solution
containing 0.05 gr $n-CH_3C_6H_4SO_3H$ in 5 ml alcohol.
Ketene (0.35 mols/hour) was then passed through
the mixture at approx. 20° resulting in the for-
mation of 3.9 gr III. Through a solution, contain-
ing 10 gr I in 250 ml $CHCl_3$, ketene (0.1 mols/
/hour was passed for 1 hour at 10-12° forming
0.75 gr V of 208-210° melting point (from alc.),

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Country : HUNGARY
 Category: Organic Chemistry. Natural Compounds and Their
 Synthetic Analogues.

G

Abs Jour: RZhKhim., No 17, 1959, No. 61021

$[\alpha]^{20}_D$ of -47° (with 4; chloroform). A solution of 0.8 gr diacetyltomatidine in 80 ml of 5% KOH solution in CH_3OH was boiled for 1 hour, yielding 0.66 gr of N-acetyltomatidine with $203-205^\circ$ melting point (from CH_3OH). A solution containing 1.5 gr III in 15 ml CH_3COOH was boiled 40 minutes leading to the formation of 1.38 gr of Ψ -O, N-diacetyl - I having $133-137^\circ$ melting point (from ethylacetate), $[\alpha]^{20}_D$ of -32° (with 3; chloroform), -26° (with 3; CH_3COOH). A solution of 10 gr I in 140 ml of absolute $\text{C}_5\text{H}_5\text{N}$ and 40 ml $(\text{CH}_3\text{CO})_2\text{O}$ was boiled 3 hours. The residue formed after the

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Country : HUNGARY

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Category: Organic Chemistry. Natural Compounds and Their
Synthetic Analogues

Abs Jour: RZhKhim., No 17, 1959, No. 61021

evaporation of solution in vacuum was boiled for 2 hours and 15 minutes with 100 ml CH_3COOH and then at 10-12° 60 ml CH_3COOH and 2 ml water were added to the solution. This was followed by the addition to the resulting solution in the drop by drop fashion of a solution containing 4 gr CrO_3 in 60 ml water and 60 ml CH_3COOH . After 30 minutes the excess of CrO_3 was eliminated by the addition of alcohol followed by boiling the reaction mixture for 3 hours, thus deriving 3.6 gr V of 171-173° melting point (from CH_3OH). From VI, by the previously described method, VII was obtained with the 66% yield and of 161-163° melting

Card : 6/7

G-40

Country : HUNGARY
Category: Organic Chemistry. Natural Compounds and Their
Synthetic Analogues

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Abs Jour: RZhKhim., No 17, 1959, No. 61021

point. For Part III see Ref. Zhur-Khin B kh,
1959, No 16, 21210. -- T. Platonova

Card : 7/7

BITE, P.

SCIENCE

PERIODICALS: ACTA CHEMICA VOL. 17, No. 2, 1958

Bite, P. Solanum alkaloids. IV. Decomposition of solasodine. I. In German.
(To be cont'd) p. 241.

Monthly list of East European Accessions (~~EEAI~~) LC, Vol. 8, No. 2
February 1959, Unclass.

BITE, P.

SCIENCE

PERIODICALS: ~~ACTA ZOOLOGICA~~ Vol. 64, No. 7/8, July/Aug. 1958
MAGYAR KEMIAI FOLYOIRAT

Bite, P. Decomposition of solasodine. p. 287

Monthly list of East European Accession (EEA) IC, VOL. 8, No. 2.
February 1958, Unclass.

COUNTRY	: Hungary	G-2
CATEGORY	:	
ABS. JOUR.	: AZKhim., No. 22 1959, No.	78560
AUTHOR	: Bite, P. and Tuzson, P.	
INST.	: Not given	
TITLE	: The Preparation of Pseudocumquinone	
ORIG. PUB.	: Magyar Kem Folyoirat, 64, No 10, 396-397 (1958)	
ABSTRACT	: The authors report an improved procedure for the preparation of pseudocumquinone (I) (A. Pongratz and K. L. Zirm, Monatsh, 83, 13 (1952)). 450 ml of coal tar containing 15% pseudocumene (II) is sulfurized (55-65°, 1 hr) with 450 ml 100% H ₂ SO ₄ , giving 90-95 gms of the dihydrate of pseudocumene-5-sulfonic acid (III). III is prepared by a similar procedure from pure II in yields of 90%. A solution of 61 gms III in 200 ml 100% H ₂ SO ₄ is treated at 10-15° (2.5 hrs) with a mixture of	
CARD:	1/2	

COUNTRY	:	Hungary	G-2
CATEGORY	:		
ABS. JOUR.	:	RZKhim., No. 22 1959, No.	78560
AUTHOR	:		
INST.	:		
TITLE	:		
ORIG. PUB.	:		
ABSTRACT	:	27 ml 98.5% HNO ₃ and 25 ml 100% H ₂ SO ₄ , followed by stirring for 1 hr at 10-15° and 1.5 hrs at about 20°; the yield of 3,6-dinitro-5-pseudo- cumenesulfonic acid (IV) is 57%. The reduction of 48 gms IV followed by evaporation to 600 ml, addition of 18 gms CrO ₃ in 50 ml water, and steam distillation, gives I, yield 62%, mp 31-33°.	
		G. Yakobson	

CARD: 2/2

BITE, Pal; JOKAY, Laszlo; PONGRACZNE STERK, Lili

Newer results concerning steroid compounds isolated from
Solanum laciniatum; a preliminary communication. Magyar
folyoir 68 no.12:555 D '62.

1. Gyogyszeripari Kutato Intezet, Budapest.

BECK, Mihaly; BITE, Pal; BRUCKNER, Gyozo; CSENTES, Jozsef; CSUROS, Zoltan;
DEAK, Gyula; ERDEY-GRUZ, Tibor; ERDEY, Laszlo; FABIAN, Pal;
FINALY, Istvan; FODOR, Gabor; FODORNE CSANYI, Piroska;
GYORBIRO, Karoly; INZELT, Istvan; KUCSMAN, Arpad; NEUMANN, Erno;
PUNGOR, Erno; SCHNEER, Anna; SCHULEK, Elemer; SZABADVARY, Ferenc

Rules for the Hungarian chemical nomenclature and orthography.
Kem tud kozl MTA 17 no.1/4:1-292 '62.

1. "A Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalyanak Kozlemenyei" szerkeszto bizottsagi tagja (for Bruckner, Csuros, Laszlo Erdey, G.Fodor, and Schulek).
2. "A Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalyanak Kozlemenyei" szerkesztoje (for Erdey-Gruz).
3. "A Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalyanak Kozlemenyei" technikai szerkesztoje (for Finaly).
4. Muvelodesugyi Miniszterium (for Csentes).
5. Magyar Tudomanyos Akademia Helyesitasi Bizottsage (for Fabian).
6. Nehezipari Miniszterium (for Neumann).

BITE, Pal; PONGRACZNE STERK, Lili; DISZLER, Eszter

Synthesis of ajmaline derivatives. I. Magy kem folyoir 69 no.2:84-87
F '63.

1. Gyogyszeripari Kutato Intezet, Budapest.

FODOR, Gabor, akademikus; BEKE, Denesne; BITE, Pal, kandidatus; DOBO, Pal;
FARKAS, Lorant, kandidatus; F. VARGA, Eva; LEMPert, Karoly, kandidatus;
~~OTVOS~~, Laszlo, kandidatus; SZANTAY, Csaba, kandidatus; URESCH, Ferenc

An account of the Prague Symposium on Natural Organic Compounds.
Kem tud kozl MTA 19 no.1:95-103 '63.

1. Magyar Tudomanyos Akademia Sztereokemiai Kutato Csoportja,
Budapest (for Fodor, Beke, Lempert, Otvos, Uresch). 2. Magyar
Tudomanyos Akademia Kemiai Tudomanyok Osztalya (for Bite, Dobo,
Farkas, F. Varga, Szantay). 3. "A Magyar Tudomanyos Akademia
Kemiai Tudomanyok Osztalyanak Kozlemenyei" szerkeszto bizottsagi
tagja (for Fodor).

BITE, Pal, dr. (Budapest, VII., Rottenbiller u. 26); PONGRACZ-STERN,
Lili (Mrs) (Budapest, VII., Rottenbiller u. 26); DISZLER,
Eszter (Mrs) (Budapest, VII., Rottenbiller u. 26)

Preparation of ajmaline derivatives. Pt.1. Acta chimica Hung
38 no.1:47-52 '63.

1. Research Institute for Pharmaceutical Industry, Budapest.

LENARD, Kato, dr. (Miss) (Budapest, VII., Rottenbiller u. 26);
BITE, Pal, dr. (Budapest, VII., Rottenbiller u. 26)

New synthesis of 2-oxo-benzo (a) Quinolizine derivatives.
Acta chimica Hung 38 no.1:57-58 '63.

1. Research Institute for Pharmaceutical Industry, Budapest.

LENARD, Kato; BITE, Pal

New synthesis of 2-oxo-benzo (a) quinolizine derivatives;
a preliminary communication. Magy kem folyoir 69 no.9:423-424
S '63.

1. Gyogyszeripari Kutato Intezet, Budapest.

ERDEY-GRUZ, Tibor, akademikus; BRUCKNER, Gyozo, akademikus; VARGHA, Lázló;
KORACH, Mor, akademikus; FREUND, Mihály, akademikus; FODOR, Gabor,
akademikus; GERECS, Arpad, akademikus; SCHAY, Geza, akademikus;
BITE, Pal, kandidatus; BOGNAR, Rezso, akademikus; FARKAS, Lorand,
kandidatus

An account of the work of the Section of Chemical Sciences, Hungarian
Academy of Sciences. Kem tud kozl MTA 22 no.2:109-152 '64.

1. Secretary, Section of Chemical Sciences, Hungarian Academy of
Sciences, and Editor, "A Magyar Tudományos Akadémia Kémiai Tudományok
Osztályának Közleményei", Budapest (for Erdey-Gruz). 2. Editorial
board member, "A Magyar Tudományos Akadémia Kémiai Tudományok
Osztályának Közleményei" (for Bruckner, Korach, Freund, Fodor,
Gerecs, Schay and Bognar). 3. Corresponding member, Hungarian
Academy of Sciences, and Editorial board member, "A Magyar
Tudományos Akadémia Kémiai Tudományok Osztályának Közleményei"
(for Vargha).

BITEKHTINA, V.A.; ZYBIN, A.S.; KNYAGINICHEV, N.I.

Developing fisheries on the Ik-Saltain-Tenis Lake system.
Izv. Omsk. otd. Geog. ob-va no.5:131-136 '63. (MIRA 17:5)

BITEKHTINA, V.A.

Results of the introduction of bream and the whitefish *Coregonus*
albula in Lake Ik, Omsk Province. Izv. Omsk. otd. Geog. 6b.-ya
no.6:47-51 '64. (MIRA 18:9)

BITEMAN, B. L.

MODEL'MAN, G.I.; YANCHENKO, V.F., kandidat tekhnicheskikh nauk, retsenzent;
BITEMAN, B.L., inzhener, redaktor; DUGINA, N.A., tekhnicheskii
redaktor.

[Turbine mechanic; general turbine installation] Slesar'-turbinist;
obshchaya sborka turbin. Moskva, Gos.nauchno-tekhnich.isd-vo
mashinostroit.lit-ry, 1955. 134 p. (MLRA 8:11)
(Turbines)

BITEMAN, B.L.

KOVALEVSKIY, Mikhail Mikhaylovich; KIRILLOV, I.I., doktor tekhnicheskikh nauk; retsenzent; KARPINSKIY, G.K., inzhener, retsenzent; BITEMAN, B.L., inzhener, redaktor; DUGINA, N.A., tekhnicheskiy redaktor

[Steam turbines; a popular scientific sketch] Parovye turbiny; nauchno-populiarnyi ocherk. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. 102 p. (MLRA 10:2)
(Steam turbines)

BITENBINDER, Ye. A.

ERODOVICH, L.A.; BITENBINDER, Ye. A.

2,
Modification of gamma globulin and of other protein fractions of
blood serum in acute infectious diseases in children. Vop. pediat.
21 no.2:55-59 Mr-Apr '53. (MIRA 6:6)

1. Iz otdela detskikh infektsii (konsul't. prof. M.G.Danilevich)
Gosudarstvennogo nauchno-issledovatel'skogo pediatricheskogo
instituta (dir. A.L.Libov) i Detakoy infektsionnoy bol'nitsy
Sverdlovskogo rayona (glavn. vrach. N.A.Mikitina)
(BLOOD PROTEINS, in various diseases,
infect. dis. in child.)
(COMMUNICABLE DISEASES, in infant and child,
blood proteins in)

Bitenbinder, E. A., and Birkovskiy, YU. E.

About the summer outbreaks of grippe in an intern children's collective. 257

Materialy nauchnykh konferentsii, Kiev, 1959. 288pp
(Kievskiy Nauchno-issledovatel'skiy Institut Epidemiologii i Mikrobiologii)

MOROZKIN, N.I.; BITENBINDER, Ye.A.; PERVACHENKO, S.V.; BEREZNITSKAYA,
S.A.; LIKHTOROVICH, S.A.; TRET'YAK, M.A.

Seroprophylaxis of influenza in children's institutions and
hospitals. Vop. virus. 5 no. 6:682-686 N-D '60. (MIRA 14:4)

1. Institut infektsionnykh bolezney AMN SSSR, Kiyev.
(INFLUENZA)

KOMPANTSEV, N.F.; GOLYUSOVA, Ye.V.; BITENBINDER, Ye.A.; GUDIMOVA, A.L.;
ROT, L.Ya.; ROZENSHTEYN, A.M.; MODOVSKAYA, F.Ya.; FAL'KOVA, I.I.

Epidemiological characteristics of neuroviral diseases of the
Coxsackie and ECHO types. Vrach. delo no. 3:104-107 Mr '61.

(MIRA 14:4)

(VIRUS DISEASES)

MOROZKIN, N.I.; KHERSONSKAYA, R.Ya.; BITENBINDER, Ye.A.

Clinical aspects of adenovirus diseases caused by the serotype
VII. *Pediatrics* 39 no.4:27-29 Ap '61. (MIRA 14:4)

1. Iz Instituta infektsionnykh bolezney AMN SSSR.
(ADENOVIRUS INFECTIONS)

MOROZKIN, N.I., prof.; BITENBINDER, Ye.A., kand.med.nauk; KOLESNIKOV, G.F.,
kand.med.nauk; SLOBODYANYUK, M.I. (Kiyev)

Differential diagnosis of influenza. Vrach. delo no.1:112-116 Ja '62.
(MIRA 15!2

1. Institut infektsionnykh bolezney AMN SSSR.
(INFLUENZA)

KHERSONSKAYA, R.Ya.; BITENBINDER, Ye.A.; PASHCHENKO, A.S.

Clinical and roentgenological pulmonary changes in adenoviral diseases. *Pediatrics* 42 no.9:14-18 S'63. (MIRA 17:5)

1. Iz Instituta infektsionnykh bolezney Ministerstva zdravookhraneniya UkrSSR.

BITENBINDER, Ye.A. [Bitenbinder, IE.A.]; BUZHIYEVSKA, T.I. [Buzhyievs'ka, T.I.]

Outbreak of influenza among neonates. Ped., akush. i gin. 25
no.1:27-30'63 (MIRA 16:5)

1. Institut infektsiynikh khvorob Ministerstva okhoroni zdrov'ya
URSR (direktor-prof. I.L.Bogdanov [I.L.Bohdanov]).
(INFANTS (NEWBORN) —DISEASES) (INFLUENZA)

GOLYUSOVA, Ye.V. (Kiyev); KHERSONSKAYA, R.Ya. (Kiyev); BITENBINDER, Ye.A.
(Kiyev); GORBUNOVA, Ye.N. (Kiyev)

State of the cardiovascular system in adenovirus diseases. Vrach.
delo no.3:93-97 Mr '64. (MIRA 17:4)

1. Institut infektsionnykh bolezney Ministerstva zdavookhraneniya
UkrSSR.

CHAFURZAYA, N.A. (Kiyev): REZENBINDER, Ya.A. (Kiyev)

Clinical and epidemiological characteristics of influenza in
infants in an intraepidemic period (1960-1961). Stet.nauch.trud.
Inst.infek.bcl. no.4143-148 '61. (MIRA 18:6)

KOLESNIKOV, G.P. [Kolesnikov, H.P.], kand.med.nauk; BITENBINDER, Ye.O.
[Bitenbinder. YE.O.], kand.med.nauk; KOMPANTSEV.M.P.

Clinical epidemiological characteristics of outbreaks of serous
meningitis in the Ukraine caused by certain Coxsackie viruses.
Ped., akush. i gin. 24 no.1:22-25'62. (MIRA 16:8)

1. Institut' infektsionnykh bolezney AMN SSSR, Kiyev.
(UKRAINE—MENINGITIS) (COXSACKIE VIRUSES)

BITTEL DOBRZYNSKA, Nadzieja

Deep metabolic disorders and diarrhea in nephrotic syndrome treated with ACTH. Pol. tyg. lek. 17 no.5:175-178 29 Ja '62.

1. Z I Kliniki Chorob Dziecięcych w Gdansk, kierownik: prof. dr med. K. Erecinski.

(CORTICOTROPIN toxicol)
(DIARRHEA etiol)

(NEPHROTIC SYNDROME ther)
(METABOLIC DISORDERS etiol)

CZECHOSLOVAKIA/Chemical Technology - Food Industry.

H-28

Abs Jour : Ref Zhur - Khimiya, No 24, 1958, 83331

Author : Pecak, O., Bitenc, F.

Inst : -

Title : The Chemical Composition of Potatoes.

Orig Pub : Socialist. kmet., 1957, 8, No 5-6, 167-171

Abstract : The content of starch, sugar nitrogen and dry residue was studied on some varieties of potato from Slovenia. The starch content was determined by Everes' method, the sugar content by Schurell's method and the nitrogen by Kjeldahl. The dry residue was determined by drying at 105°C. to a constant weight. The potato of Rodovitnik variety had the best indices in respect to the sugar content, and in respect to starch - the Voran and Ranny Bemovets varieties.

Card 1/1

- 43 -

COUNTRY : YUGOSLAVIA H
CATEGORY : Chemical Technology. Chemical Products and Their
Applications. Fermentation Industry.
ABS. JOUR. : RZhKhim., No 17, 1959, No. 62496
AUTHOR : Bitenc, F.
INSTITUTE : -
TITLE : Effects of Sulfurous and Ascorbic Acids on the
Oxidizing Process in Wines
ORIG. PUB. : Socialist. kmet., 1957, 8, No 5-6, 171-183
ABSTRACT : No abstract.

Card: 1/1

H - 112

BITENC, Franc, dr inz., docent (Ljubljana)

Use of sorbic acid for the preservation of fruit juices and
pulp. Tehnika Jug 17 no.8:Suppl.: Prehran ind 16 no.8:1583-1584
Ag '62.

1. Biotehniska fakulteta, Ljubljana, Krekov trg 1.

BITENS, K.R., elektromekhanik

Winding and drawing unit. Avtom., telem. i sviaz' 7 no.6:35
Je '63. (MIRA 17:3)

1. Yelgavskaya distantiya signalizatsii i svyazi
Pribaltiyskoy dorogi.

BITEPAZH, A.

PA 15T32

USSR/Chemistry - Aluminum Silicates
Chemistry - Catalysis

Feb 1947

"Relation Between the Catalytic Activity and the
Exchange Capacity of the Aluminum Silicates,"
Yu. A. Bitepazh, 8 pp

"Zhur Obshch Khim" Vol XVII, No 2

Study showing that active aluminum silicates possess
a highly developed surface, accessible to the
molecules of the reacting substances.

15T32

COMMON ELEMENTS		COMMON VARIABLES	
Relation between catalytic activity and ion-exchange ability of aluminosilicates. Yu. A. Bityagin (Leningrad High Pressure Inst.). <i>J. Gen. Chem. (U.S.S.R.)</i> 17, 199-207(1947)(in Russian).—A rough parallelism is found between the cation exchange capacity of 6 different sorts of natural clays and kaoline, as expressed by their total content of the exchangeable cations $H^+ + Al^{+++}$ (in milliequiv./100 g.), and their cracking catalytic activity α after acid activation and ignition at 500–520° even though the latter treatment results in a reduction of the original α. Treatments harmful to the catalytic activity also lower α; thus a clay with an original $\alpha = 34$, after normal activation		had $\alpha = 18$, $\alpha = 33\%$ (yield of gasoline in catalytic cracking), and after treatment with too highly concd. (85%) H_2SO_4 showed $\alpha = 16$, $\alpha = 27\%$. With more accuracy, the same parallelism was demonstrated on a synthetic aluminosilicate, dried at 110° and subsequently treated overnight, in the cold, with varying amts. of 0.2 N HCl, washed with distd. water until complete removal of Cl^-, dried at 80° and 110°, and ignited at 540–80°. The catalytic activity α was detd. by the yield in vol. of gasoline (fraction b. < 200°) in cracking a raw oil b. 230–300°, and by the enrichment in aromatics and unsatd. compds. of a cracking-gasoline of 1 no. 80, aromatics content 0%. With the amt. of HCl used in activation increasing from 0 to 660 milliequiv./100 g., the amt. of Na^+ in the dried catalyst fell from the initial 160 milliequiv./100 g. to 0, the amt. of H^+ rose from 0 to 160; in the ignited catalyst, Na^+ fell from 95 to 0; for HCl 320 milliequiv./100 g., H^+ rose from	
0 to 30; with HCl 640, Na^+ remained 0, H^+ dropped slightly to 28. Concurrently, with the amt. of HCl rising to 320, α increased from 5 to 43% in cracking yield, from 3 to 36% in yield of aromatics, at the expense of the unsatd. compds. falling from 36 to 4%; treatment with HCl 640 resulted in a slight drop of α to 37% gasoline, and a slight increase (to 6%) in the amt. of unsatd. compds. That the high catalytic activity is due primarily to an exchange of Na^+, not to the increased porosity brought about by the acid treatment, was shown by activating with a 0.5 N NH_4Cl soln. until complete removal of Na^+; the catalyst thus treated had $H^+ 165$, $\alpha = 41\%$ (cracking-gasoline yield), i.e., the same activity as the best acid-treated catalyst; in this case, the exchange of Na^+ for H^+ was brought about by first an exchange for NH_4^+ which, on ignition, leaves H^+. The ion-exchange capacity of the synthetic aluminosilicate remains at its 540–600° level up to 850–900°; in natural clays, it disappears at 600–700°. Activation by exchange of Na^+ for H^+ can be reversed by poisoning with Na^+: natural gumbrin with an initial H^+ content of 25 milliequiv./100 g., initial α (by the dealkylation yield of a butylbenzene fraction b. 165–75°) 45%, after 1 hr. boiling with 1 N NaCl, $H^+ 7$, $\alpha 8.6$; reversed cold treatment of the poisoned clay with 0.05 N HCl restored $H^+ 12$, $\alpha 40$; boiling with distd. H_2O reduced H^+ to 13, α only to 36, with subsequent HCl treatment causing practically no further change. With the synthetic aluminosilicate, cold treatment in 1 N NaCl reduced H^+ from 46 to 37, α from 81 to 44%; even more effective as Na poison is 1 N NaOAc, resulting in $H^+ 30$, α		2	
ASB-LLA METALLURGICAL LITERATURE CLASSIFICATION			
EDMUND SYNDICATE		EDMUND SYNDICATE	
EDMUND SYNDICATE		EDMUND SYNDICATE	